

Financial Education and Access to Savings Accounts: Complements or Substitutes?

Julian C. Jamison
CFPB

Dean Karlan
Yale

Jonathan Zinman
Dartmouth

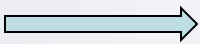
Cherry Blossom Financial Education Institute

April 10, 2015



This presentation is the result of independent research and does not (necessarily) represent the views of the CFPB or of the United States government.

Motivation

- What is value of “emergency savings” and avoiding high-cost credit products?
- International: microcredit  microsavings
- Can saving become a habit among youth?
- Obstacles to saving
 - Access ⇨ information ⇨ preferences

Previous literature

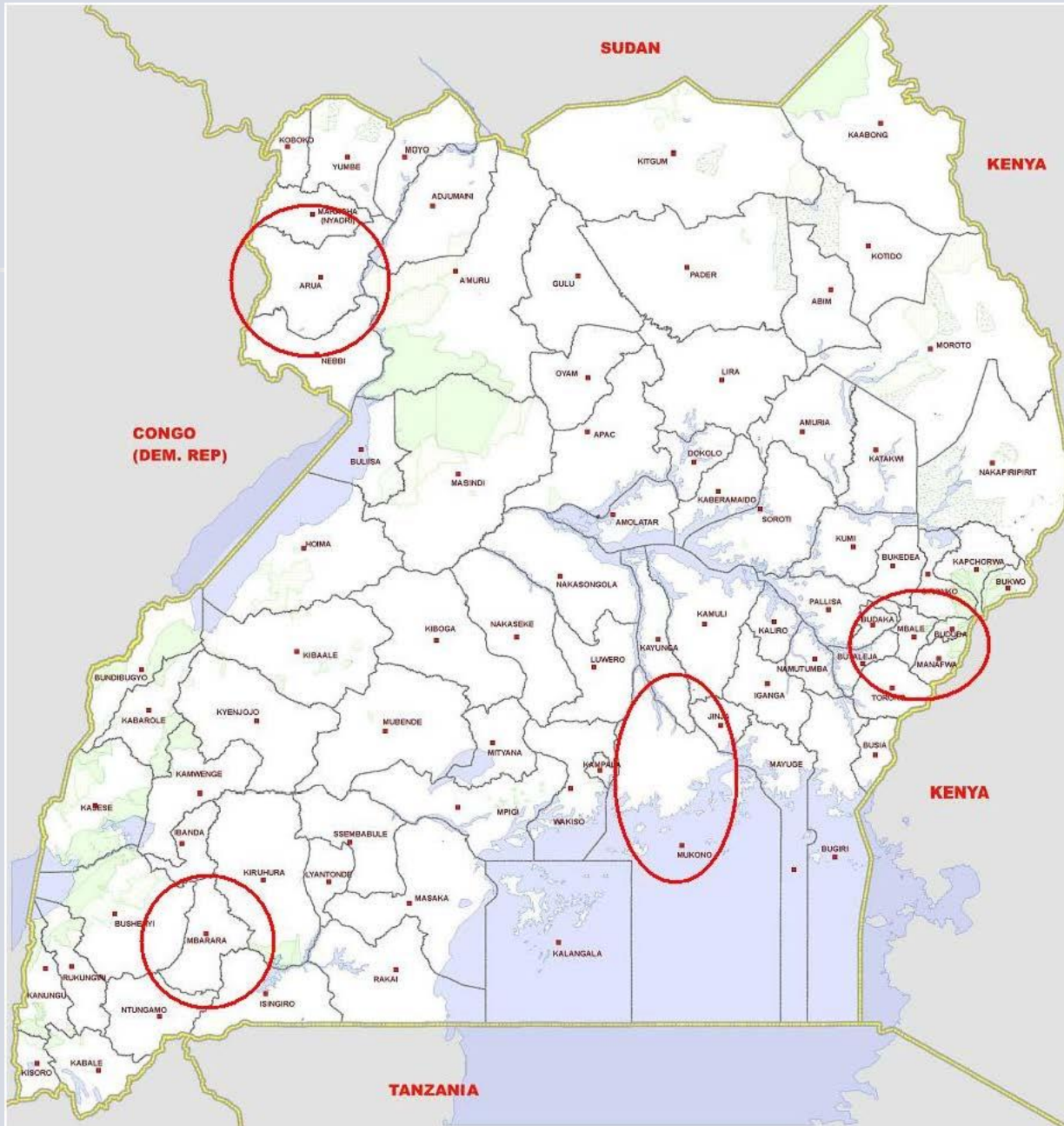
- Mixed results on financial literacy & education
 - Indonesia: Cole-Sampson-Zia (2011) find no more likely to open savings acct, whereas small subsidies do much more
 - India: Field et al. (2010) no impact on prob of saving
 - Several recent review articles (Hastings-Madrian-Skimmyhorn 2013; Karlan-Ratan-Zinman 2013; Fernandes-Lynch-Netemeyer 2014) conclude that evidence is scant, mixed, and on the whole negative

Previous literature

- Mostly positive results from access
 - Subsidies: Dupas-Robinson (2013) and others generally find more accounts and more usage
 - Branches: Burgess-Pande (2005) and Ashraf-Karlan-Yin (2006) find both increased saving and increased downstream outcomes such as income
 - Youth: Bruhn *et al.* (2013) find that fin ed in high school leads to increased knowledge and [self-reported] saving
 - Contrast to the mostly negative (neutral) evidence on access to microcredit, e.g. Banerjee (2013)

Background

- Uganda has a very young population (52% under age 15); current actions may have a large effect
- Generally low savings rate (even compared to e.g. Kenya) – can 'move the needle' and develop habits
- Partnered with FINCA, a registered bank in Uganda owned by a non-profit in the US
- Small communities, often no bank branches within 1-2 hours; usually expensive to maintain accounts







Intervention

- Randomized 240 Church of Uganda youth groups into four arms: control, Educ only, Account only, and Educ+Account
- Each group has 15-40 members, although not all active, with an average age of 24.5

240 youth clubs

25%:
Control

25%:
Financial
Education

25%:
Account
Access

25%:
Educ +
Account

Intervention

- Randomized 240 Church of Uganda youth groups into four arms: control, Educ only, Account only, and Educ+Account
- Each group has 15-40 members, although not all active, with an average age of 24.5
- Baseline survey of 2810 youth
- Endline survey (final $n=2680$ or 95%) one year later, roughly 9 months after interventions
- All results are “intent-to-treat” or ITT

Baseline characteristics

	Account only	Educ only	Account +Educ	Control	f-test p-value
Proportion female	0.43	0.41	0.42	0.44	<i>0.33</i>
Has formal account	0.12	0.13	0.17	0.13	<i>0.71</i>
Proportion in school	0.37	0.39	0.38	0.39	<i>0.72</i>
Income last 90 days (^000 USH)	147	146	169	141	<i>0.42</i>
Club has money	0.82	0.70	0.77	0.83	<i>0.24</i>
Club has account	0.07	0.05	0.08	0.07	<i>1.0</i>

Financial education

- Developed by IPA, Freedom from Hunger, and Straight Talk Foundation
- One 90-minute session per week for 10 weeks
- Mean attendance 4.7 sessions (with 75% ≥ 1)
- Focused on saving, but also general finance:
 - Myths about banks
 - Saving vs borrowing
 - Goal-oriented saving
 - Budgeting and spending
 - Challenges, including negotiating around money

Group accounts

- Simplified opening procedure; no fees then or later
- Required to make a deposit within 30 days of opening, and to maintain balance of 50000 USH
- One account per group, with multiple co-signers
- This decreased transaction costs, but required more trust (one reason to use existing church groups)
- Everyone trained to read / use ledger for keeping track of individual balances
- 66% of treatment groups opened an account

Data and methods

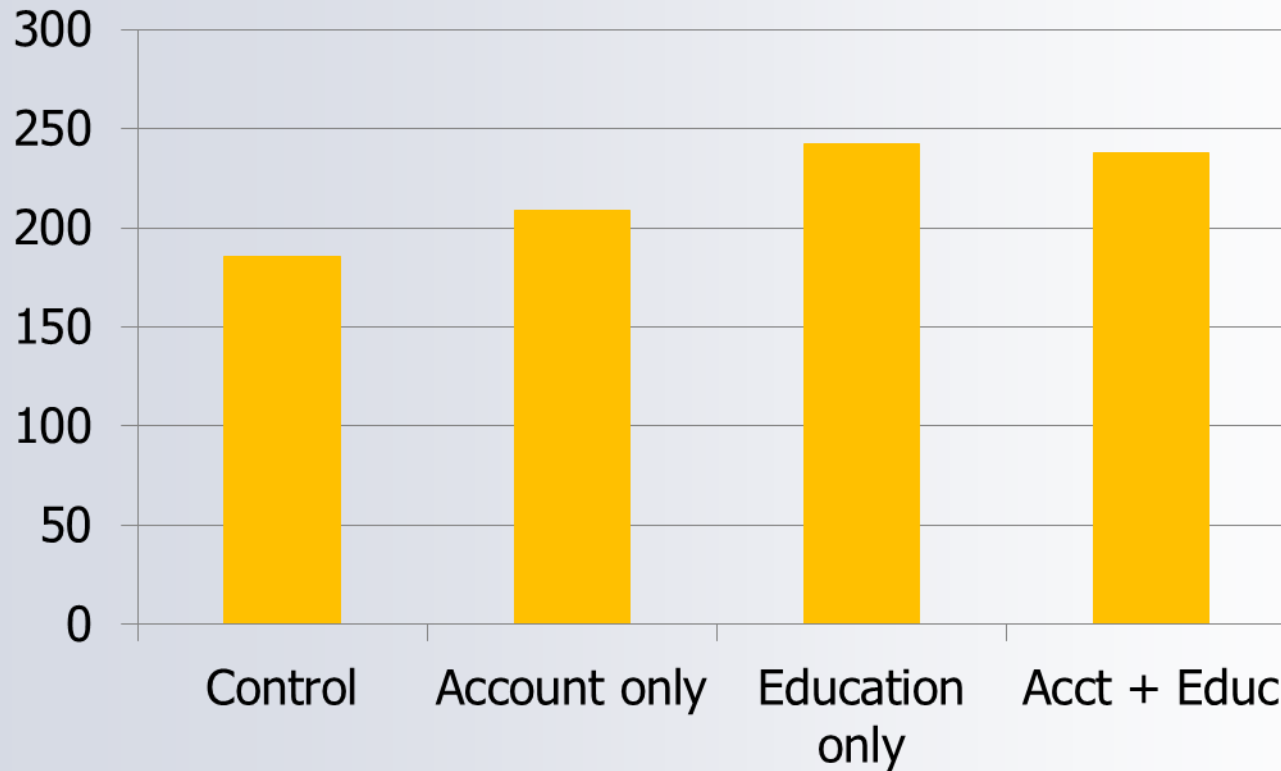
- Baseline and endline surveys include
 - Basic demographics; some risk, time, & social preferences
 - Work, income, and consumption measures
 - Financial knowledge
 - Borrowing, lending, and saving behavior
- Admin savings data from the two Account arms
- Estimate effects of each treatment (using dummy for assignment) on various outcomes
 - Controls: demographics; baseline values when possible
 - Fixed effects for region and initial club savings level, which were both used for stratification

Results: inputs

<i>LHS:</i>	Financial knowledge	Numeracy	Time prefs	Risk tolerance	Altruism
Acct only	-0.01 (0.03)	-0.01 (0.03)	0.02 (0.03)	0.00 (0.03)	-0.01 (0.04)
Educ only	0.09*** (0.03)	0.01 (0.03)	-0.01 (0.03)	-0.07** (0.03)	-0.04 (0.03)
Acct+Educ	0.08*** (0.03)	0.05* (0.03)	-0.01 (0.03)	-0.06* (0.03)	-0.06* (0.03)
control mean	0.00	0.00	0.00	0.00	0.00
<i>n</i>	2680	2680	2680	2680	2680

Results: saving

Total saving ('000 USH)



Results: saving

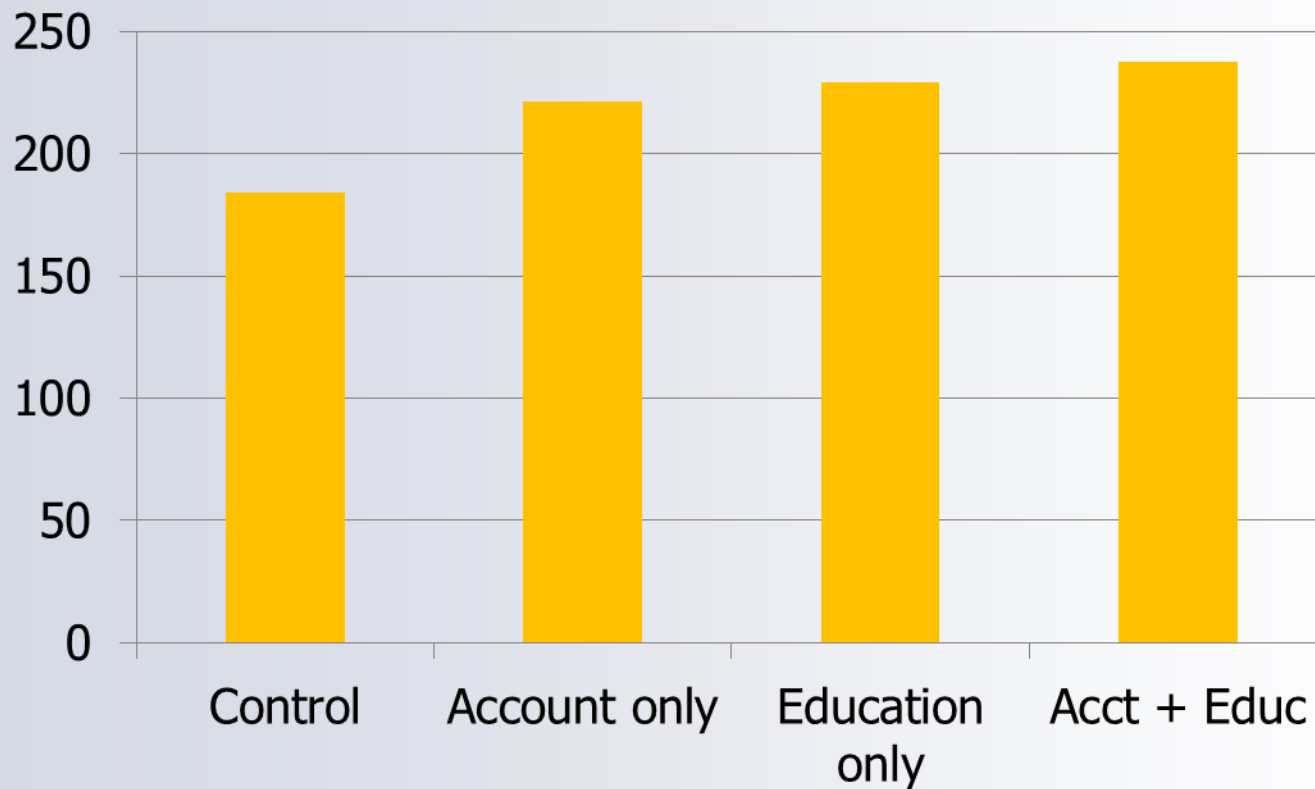
<i>LHS:</i>	Balance (`000 USH)	99% trim	Total saving (`000 USH)	99% trim
	<i>bank admin data</i>		<i>survey data</i>	
Acct only			52.8 (55.2)	22.8 (26.3)
Educ only			127.9** (62.0)	56.6* (30.0)
Acct+Educ	1.21 (1.02)	1.05* (0.45)	17.8 (46.0)	52.3* (27.9)
comparison mean	1.61	0.49	247.1	185.7
<i>n</i>	3775	3738	2678	2647

Results: saving & borrowing

- Financial education increases savings
- Account access may also increase savings: positive but insignificant point estimate; not significantly less (in the survey data) from Educ arms
- No significant changes in borrowing, other assets, or expenditures
- Hence increased saving is changing overall wealth

Results: income

90-day earnings ('000 USH)



Results: income

<i>LHS:</i>	Earnings in past 90 days (`000 USH)	99% trim
Acct only	30.7 (33.5)	37.0** (16.5)
Educ only	23.7 (30.7)	45.0*** (16.2)
Acct+Educ	34.1 (35.2)	53.3*** (18.0)
control mean	232.8	184.1
<i>n</i>	2679	2652

Results: income & employment

- Earned income increases for all treatment arms, at roughly equal levels
- This implies there exist downstream effects of the interventions, beyond even savings behavior
- We do not observe any significant effects on hours worked, business investment, or school attendance
- However these are fairly imprecisely estimated, so cannot distinguish mechanisms linking saving and income

Conclusion

- Financial education impacts knowledge and behavior
- We do not observe significant differences in either savings or income between education and access
- This suggests that they are **substitutes** rather than complements – and as a byproduct that knowledge may not be necessary for downstream outcomes
- Policy recommendations would depend on the relative cost-effectiveness of each intervention
- In the field now to get more detail on source of additional income: what is the mechanism?

Thank you!

- DFID for funding
- Freedom from Hunger, Straight Talk, FINCA, and the Church of Uganda for cooperation throughout
- Sarah Kabay, Daniel Katz, Sana Khan, Charity Komujurizi, Matthew Lowes, Justin Loiseau, Joseph Ndumia, Pia Raffler, Elana Safran, Marla Spivack, and Glynis Startz for research support